



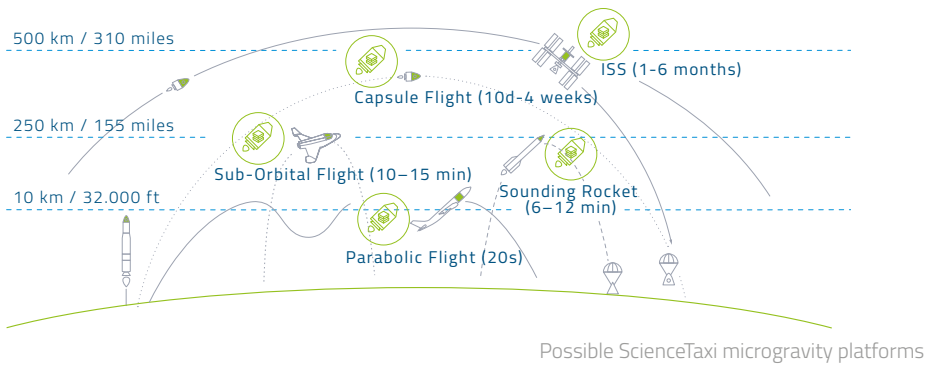
start 2019

# ScienceTaxi Experiment Facility

Science Taxi,  
under permission of



**kiwi ScienceTaxi** was developed by AIRBUS Defence and Space as an experiment facility with the intended use for research. Currently, **ScienceTaxi is dedicated for studying biology and life science** (plant, animals, microorganisms) in a reduced gravity environment. It can support the cultivation, stimulation and autonomous operation of the experiments under regulated experimental volume.



## ScienceTaxi FACTBOX

**ScienceTaxi is the only middeck-locker sized incubator facility which will be executed in a "TAXI" mode:**

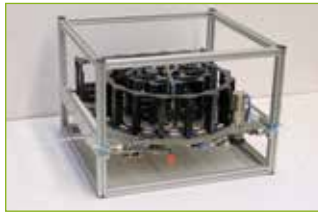
- ✓ no crew time needs as the complete preparation is done on ground
- ✓ access to a greater pool of microgravity platforms
- ✓ compatible with the complete ScienceShell H/W portfolio
- ✓ real time HK data monitoring and commanding

Thanks to a strong network of partners kiwi is the only one to offer all types of microgravity platforms for ScienceTaxi: Parabolic Flight, Sub-Orbital, Orbital (ISS, LEO and beyond).

# ScienceTaxi Experiment Facility

Following main features are provided currently by ScienceTaxi

- **complete flight configuration** will be **prepared** and verified on ground **before launch**
- **2 Middeck-Locker size incubators** for flight (one identical ground incubator system)
- **Experiment Platforms, with variable-g centrifuge** (diameter 390 mm) and variable experiment accommodation, compatible to the incubators and to the complete ScienceShell experiment H/W portfolio
- Temperature range +4°C to +40°C
- **Variable speed** from 0.05 g to 2.0 g
- **Fully automated processing** of experiment units according pre-defined timeline
- Accommodation of up to **44 ScienceShell experiment sets**
- ScienceTaxi facility **generates** a full set of **HK Data** (one packet) **every 10 seconds**
- Power Consumption
  - Run Mode 36°C: 40 W
  - Cool Mode 6°C: 50 W
  - Transients 5 K/h: 80 W
  - Peak: 130 W / Sleep: 20 W
- Incubator mass including Experiment Platform about 32 kg
- Real-time HK data monitoring and commanding capabilities via remote internet access



## THE KIWI BENEFITS FOR OUR CUSTOMERS

- ▶ **Lower entry cost barrier to microgravity (from 10 k€)**  
(Off-the-shelf products available, standardized price lists and contracts)
- ▶ **Quicker access to microgravity (from 6 months)**  
(Single point of contact, wide range of experiment platforms, standardized hardware options)
- ▶ **Service tailored to your needs**  
(More options available: adaptation and support to new hardware development, access to a network of experienced partners)
- ▶ **Access to funding**  
(Network of private investors and foundations, partnerships with crowdfunding organizations)



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